## IN THE CLAIMS:

Please substitute the following claims for the same numbered claims in the application.

- 1. (Currently Amended) A method of providing access for a plurality of <u>application-level</u> users to an application comprising a plurality of resource class components collectively executing on multiple networked machines, the method comprising steps of:
- (i) receiving an incoming flow of requests from <u>application-level</u> users to use an application <u>and components of said application</u>;
- (ii) providing, for each of the <u>application-level</u> users, respective sets of one or more <u>application</u> instances of each resource class component for the application on one or more machines, to service the incoming requests from respective <u>application-level</u> users to use the application;
- (iii) directing each of the incoming requests to a particular <u>application</u> instance of an appropriate resource class component;
- (iv) monitoring, for each of the <u>application-level</u> users, the number of request serviced by the <u>application</u> instances of the resource class components of the <u>application</u>; <del>and</del>
- (v) increasing or decreasing the number of <u>application</u> instances of one or more resource class components in response to the monitored number of requests for each resource class component[[.]];

maintaining a record of the current rate of requests received from respective applicationlevel users, based on the monitored number of serviced requests; and

collectively and automatically allocating fractions of different resource class components
to a particular application-level user in response to the increased or decreased number of
application instances of one or more resource class components.

- 2. (Currently Amended) The method as claimed in claim 1, further comprising the step of: directing each of the incoming requests from respective <u>application-level</u> users to a particular <u>application</u> instance of an appropriate resource class component from a respective set of one or more <u>application</u> instances of each resource class component, said particular <u>application</u> instance being identified as the least loaded of the <u>application</u> instances of the appropriate resource class component from that respective set.
- 3. (Currently Amended) The method as claimed in claim 1, wherein the step of providing application instances of each resource class component further comprises the steps of:

initiating one or more <u>application</u> instance of one or more resource class on a plurality of machines to service incoming requests to use the application; and

terminating one or more <u>application</u> instances of each resource class on a plurality of machines to service incoming requests to use the application.

- 4. (Currently Amended) The method as claimed in claim 1, wherein requests from application-level users to use the application are stored in a queue for execution by a particular application instance of the appropriate resource class on a first-in-first-out basis.
- 5. (Currently Amended) The method as claimed in claim 1, further comprising the step of: maintaining a record of service obligations to respective <u>application-level</u> users.
- 6. (Currently Amended) The method as claimed in claim 5, further comprising the step of: 09/921,868

increasing or decreasing, for each of the <u>application-level</u> users, the number of <u>application</u> instances of each resource class component in response to the monitored number of requests for each resource class component, wherein the service obligations to respective <u>application-level</u> users are at least met.

- 7. (Cancelled).
- 8. (Currently Amended) The method as claimed in claim 7, wherein said step of increasing or decreasing the number of <u>application</u> instances of said one or more resource classes in (i) at least partly based upon said recorded current rate of requests received from respective <u>application-level</u> users, and (ii) at least partly based on predetermined information that correlates changes in request rates with charges in the corresponding number of <u>application</u> instances of said one or more resource classes required to service said request rates.
- 9. (Currently Amended) The method as claimed in claim 1, wherein one or more of the <u>application-level</u> users are organizations, and the requests are generated by individuals associated with the respective organization.
- 10-12. (Canceled)
- 13. (Currently Amended) A method of providing access for a plurality of application-level users to an application comprising a plurality of resource class components collectively executing on multiple networked machines, the method comprising steps of:

09/921,868

receiving an incoming flow of requests from <u>application-level</u> users to use an application and components of said application;

providing, for each of the <u>application-level</u> users, respective sets of one or more <u>application</u> instances of each resource class component for the application on one or more machines, to service the incoming requests from the <u>application-level</u> users to use the application;

monitoring, for each of the <u>application-level</u> users, the resources currently available and resources currently consumed by the requests serviced by <u>application</u> instances of the resource class components of the application; <del>and</del>

maintaining (i) a record of resources currently available to respective <u>application-level</u> users; and (ii) a record of resources currently consumed by respective <u>application-level</u> users; both records of said resources being maintained in respect of each of the one or more <u>application</u> instances of each resource class components[[.]]; <u>and</u>

adjusting the respective numbers of said one or more application instances of each resource class component; and

collectively and automatically allocating fractions of different resource class components to a particular application-level user in response to a fluctuating number of application instances of one or more resource class components.

wherein said application instances of each resource class component are adjusted for each application-level user based (i) at least partly on said records of resources currently available and currently consumed by respective application-level users, and (ii) at least partly on predetermined information that estimates the number of each resource class components required to service requests for said application instances of the resource class components.

09/921,868

- 14. (Cancelled).
- 15. (Currently Amended) A system for providing access for a plurality of <u>application-level</u> users to an application comprising a plurality of resource class components collectively executing on multiple networked machines, the system comprising:
- (i) means for receiving an incoming flow of requests from <u>application-level</u> users to use an application <u>and components of said application</u>;
- (ii) means for providing, for each of the <u>application-level</u> users, respective sets of one or more <u>application</u> instances of each resource class component for the application on one or more machines, to service the incoming requests form respective <u>application-level</u> users to use the application;
- (iii) means for directing each of the incoming requests to a particular <u>application</u> instance of an appropriate resource class component;
- (iv) means for monitoring, for each of the <u>application-level</u> users, the number of requests serviced by the <u>application</u> instances of the resource class components of the application; and
- (v) means for increasing or decreasing the number of <u>application</u> instances of one or more resource class components in response to the monitored number of requests for each resource class component[[.]];

means for maintaining a record of the current rate of requests received from respective application-level users, based on the monitored number of serviced requests; and

means for collectively and automatically allocating fractions of different resource class

components to a particular application-level user in response to the increased or decreased number of application instances of one or more resource class components.

- 16. (Currently Amended) A computer software program, recorded on a medium and capable of execution by computing means able to interpret the computer software program, for providing access for a plurality of <u>application-level</u> users to an application comprising a plurality of resource class components collectively executing on multiple networked machines, the computer software program comprising:
- (i) code means for receiving an incoming flow of requests from application-level users to use an application and components of said application;
- (ii) code means for providing, for each of the <u>application-level</u> users, respective sets of one or more <u>application</u> instances of each resource class component for the application on one or more machines, to service the incoming requests from respective <u>application-level</u> users to use the application;
- (iii) code means for directing each of the incoming requests to a particular <u>application</u> instance of an appropriate resource class component;
- (iv) code means for monitoring, for each of the <u>application-level</u> users, the number of requests serviced by the <u>application</u> instances of the resource class components of the application; and
- (v) code means for increasing or decreasing the number of <u>application</u> instances of one or more resource class components in response to the monitored number of requests for each resource class component[[.]];

code means for maintaining a record of the current rate of requests received from 09/921,868

respective application-level users, based on the monitored number of serviced requests; and

code means for collectively and automatically allocating fractions of different resource

class components to a particular application-level user in response to the increased or decreased

number of application instances of one or more resource class components.

17-18. (Canceled)

19. (Currently Amended) A system for providing access for a plurality of <u>application-level</u> users to an application comprising a plurality of resource class components collectively executing on multiple networked machines, the system <u>comprising</u>:

means for receiving an incoming flow of requests from <u>application-level</u> users to use an application <u>and components of said application</u>;

means for providing, for each of the <u>application-level</u> users, respective sets of one or more <u>application</u> instances of each resource class component for the application on one or more machines, to service the incoming requests from the <u>application-level</u> users to use the application;

means for monitoring, for each of the <u>application-level</u> users, the resources currently available and resources currently consumed by the requests serviced by <u>application</u> instances of the resource class components of the application; <del>and</del>

means for maintaining (i) a record of resources currently available to respective application-level users; and (ii) a record of resources currently consumed by respective application-level users; both records of said resources being maintained in respect of each of the one or more application instances of each resource class components[[.]]:

09/921,868

means for adjusting the respective numbers of said one or more application instances of each resource class component; and

means for collectively and automatically allocating fractions of different resource class components to a particular application-level user in response to a fluctuating number of application instances of one or more resource class components.

wherein said application instances of each resource class component are adjusted for each application-level user based (i) at least partly on said records of resources currently available and currently consumed by respective application-level users, and (ii) at least partly on predetermined information that estimates the number of each resource class components required to service requests for said application instances of the resource class components.

20. (Currently Amended) A computer software program recorded on a medium and able to be executed by computing means able to interpret the computer software program, for providing access for a plurality of application-level users to an application comprising a plurality of resource class components collectively executing on multiple networked machines, the computer software program comprising:

code means for receiving an incoming flow of requests from <u>application-level</u> users to use an application and <u>components of said application</u>;

code means for providing, for each of the <u>application-level</u> users, respective sets of one or more <u>application</u> instances of each resource class component for the application on one or more machines, to service the incoming requests from the <u>application-level</u> users to use the application;

code means for monitoring, for each of the <u>application-level</u> users, the resources currently 09/921,868

available and resources currently consumed by the requests serviced by <u>application</u> instances of the resource class components of the application; <del>and</del>

code means for maintaining (i) a record of resources currently available to respective application-level users; and (ii) a record of resources currently consumed by respective application-level users; both records of said resources being maintained in respect of each of the one or more application instances of each resource class components[[.]];

code means for adjusting the respective numbers of said one or more application instances of each resource class component; and

code means for collectively and automatically allocating fractions of different resource class components to a particular application-level user in response to a fluctuating number of application instances of one or more resource class components.

wherein said application instances of each resource class component are adjusted for each application-level user based (i) at least partly on said records of resources currently available and currently consumed by respective application-level users, and (ii) at least partly on predetermined information that estimates the number of each resource class components required to service requests for said application instances of the resource class components.